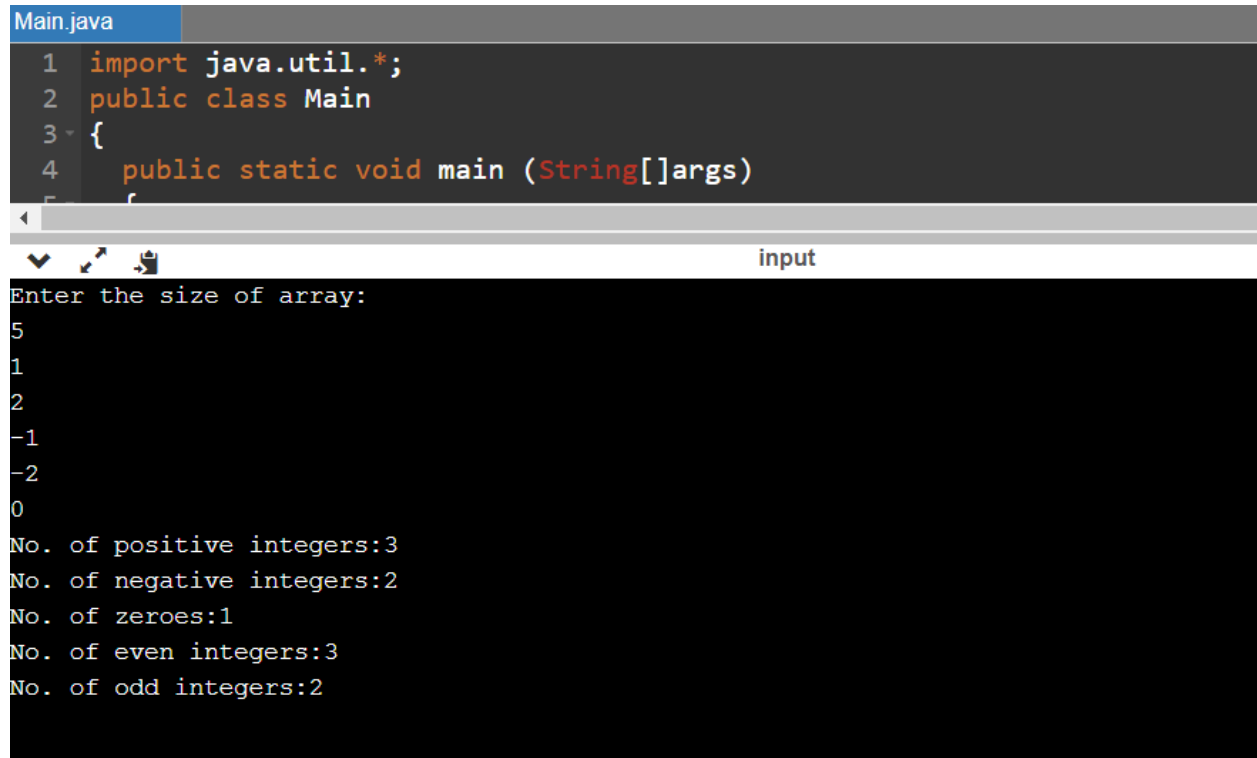


SALMA 20BCE7605

QUESTION 1 :



The screenshot shows a Java IDE with a file named 'Main.java'. The code in the editor is as follows:

```
1 import java.util.*;  
2 public class Main  
3 {  
4     public static void main (String[]args)  
5     {
```

Below the code editor, the 'input' window shows the execution output:

```
Enter the size of array:  
5  
1  
2  
-1  
-2  
0  
No. of positive integers:3  
No. of negative integers:2  
No. of zeroes:1  
No. of even integers:3  
No. of odd integers:2
```

Code:

```
import java.util.*;
```

```
public class Main
```

```
{
```

```
    public static void main (String[]args)
```

```
{  
  
    Scanner sc = new Scanner (System.in);  
  
    int positive = 0, negative = 0, odd = 0, even = 0,  
zero = 0;  
  
    System.out.println ("Enter the size of array:");  
  
    int n = sc.nextInt ();  
  
    int arr[] = new int[n];  
    for (int i = 0; i < n; i++)  
    {  
  
        arr[i] = sc.nextInt ();  
  
    }  
  
    for (int i = 0; i < n; i++)  
    {  
  
        if (arr[i] >= 0)  
  
        {  
  

```

```
        positive++;  
    }  
}
```

```
System.out.println ("No. of positive integers:" +  
positive);
```

```
for (int i = 0; i < n; i++)
```

```
{  
    if (arr[i] < 0)  
    {  
        negative++;  
    }  
}
```

```
System.out.println ("No. of negative integers:" +  
negative);
```

```
for (int i = 0; i < n; i++)
```

```
{  
  
    if (arr[i] == 0)  
  
        {  
  
            zero++;  
  
        }  
  
}
```

```
System.out.println ("No. of zeroes:" + zero);
```

```
for (int i = 0; i < n; i++)
```

```
{  
  
    if (arr[i] % 2 == 0)  
  
        {  
  
            even++;  
  
        }  
  
}
```

```
else
```

```
        odd++;  
    }  
  
    System.out.println("No. of even integers:"+even);  
    System.out.println("No. of odd integers:"+odd);  
    }  
}
```

OUTPUT

Enter the size of array:

5

1

2

-1

-2

0

No. of positive integers: 3

No. of negative integers: 2

No. of zeroes : 1

No. of even integers: 3

No. of odd integers: 2

QUESTION 2:

```
Main.java
1 import java.util.*;
2 public class Main
3 {
4     public static void main(String[] args)
5     {
6         int j=0;
7         int[] arr=new int[100];
8         int[] rev=new int[100];
9         Scanner sc=new Scanner(System.in);
10
11         while(j<100)
12         {
13             System.out.print("Enter element: ");
14             int k=sc.nextInt();
15             arr[j]=k;
16             j++;
17         }
18         System.out.print("Reverse array is as follows: ");
19         for(int i=j-1; i>=0; i--)
20             System.out.print(arr[i] + " ");
21     }
22 }
```

input

Enter element:
2
4
5
6
1
Reverse array is as follows:
1 6 5 4 2

Code

```
import java.util.*;

public class Main
{

    public static void main(String[] args)
    {

        int j=0;
        int[] arr=new int[100];
        int[] rev=new int[100];

        Scanner sc=new Scanner(System.in);

        System.out.println("Enter size of array:");

        int n=sc.nextInt();

        System.out.println("Enter element:");
```

```
for(int i=0;i<n;i++)  
    arr[i]=sc.nextInt();  
for(int i=n-1;i>=0;i--)  
{  
    rev[j]=arr[i];  
    j++;  
}
```

```
System.out.println("Reverse array is as  
follows:");
```

```
for(int i=0;i<n;i++)  
    System.out.print(rev[i]+" ");  
}  
}
```


Output

Enter size of array:

5

Enter element:

2

4

5

6

1

SALMA

Reverse array is as follows:

1 6 5 4 2

QUESTION 3:

```
Main.java
1 import java.util.*;
2 public class Main
3 {
4     public static void main (String[] args)
5     {
6         Scanner sc = new Scanner (System.in);
7         System.out.print("Enter size of array:");
8         int size = sc.nextInt();
9         int arr[] = new int[size];
10        for (int i = 0; i < size; i++)
11        {
12            arr[i] = sc.nextInt();
13        }
14        int largest = arr[0];
15        int secondLargest = 0;
16        for (int i = 1; i < size; i++)
17        {
18            if (arr[i] > largest)
19            {
20                secondLargest = largest;
21                largest = arr[i];
22            }
23            else if (arr[i] > secondLargest)
24            {
25                secondLargest = arr[i];
26            }
27        }
28        System.out.print("The largest number of this array is " + largest);
29        System.out.print("\nThe 2nd largest number of this array is " + secondLargest);
30    }
31}
```

input

```
Enter size of array:5
Enter all the elements:
1
2
3
6
5
The largest number of this array is 6.
The 2nd largest number of this array is 5.
```

Code

```
import java.util.*;

public class Main
{
    public static void main (String[] args)
    {
        Scanner sc = new Scanner (System.in);
        System.out.print("Enter size of array:");
```

```
int n = sc.nextInt();
```

```
int arr[] = new int[n];
```

```
System.out.println("Enter all the  
elements:");
```

```
for (int i = 0; i < array.length; i++)
```

```
{
```

```
arr[i] = sc.nextInt();
```

```
}
```

```
int first, second, temp;
```

```
first= array[0];
```

```
second = array[1];
```

```
if (first < second)
{
    temp = first;
    first = second;
    second = temp;
}
```

```
for (int i = 2; i < arr.length; i++)
{
    if (arr[i] > first)
    {
        second = first;
        first = arr[i];
    }
}
```

```
        else if (arr[i] > second && arr[i] !=  
first)  
        {  
            second = arr[i];  
        }  
    }  
  
    System.out.println ("The largest number of  
this array is " + first + ".");  
  
    System.out.println ("The 2nd largest  
number of this array is " + second + ".");  
  
    }  
}
```

OUTPUT

Enter size of array:5

Enter all the elements:

1

2

3

6

5

The largest number of this array is 6.

The 2nd largest number of this array is 5.
